

REMARKS

Applicant thanks the Examiner for the thorough consideration given the present application.

Claims 1-3, 8 and 9 are now present in this application. Claim 1 is independent.

Claims 4-7 have been canceled and claim 1 has been amended. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Citation

Applicant thanks the Examiner for considering the reference supplied with the Information Disclosure Statement filed January 26, 2009, and for providing Applicant with an initialed copy of the PTO-SB08 form filed therewith.

Rejection Under 35 U.S.C. § 102 and 35 U.S.C. § 103

Claims 1 and 3 stand rejected under 35 U.S.C. § 103 as being obvious over US 3,010,861 (Reese) in view of US 5,556,699 (Niira). Further, claims 1, 2, 8, and 9 stand rejected under 35 U.S.C. § 103 as being obvious over Niira in view of JP 2001178452 (Kanari et al.) and claim 5 is rejected under 35 U.S.C. § 103 as obvious over Niira in view of Kanari et al. and US 2002/0185199 (Myers). These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

While not conceding the appropriateness of the Examiner's rejections, but merely to advance prosecution of the instant application, Applicant respectfully submits that independent claim 1 has been amended to incorporate the subject matter of claim 5 and recite a combination of steps in an antibiotic method for processing a part of a refrigerator using a silver-based antibiotic substance including forming a perform of the part to have a thickness relatively smaller than that of a finished product of the part through an extrusion process, mixing 0.05 to 0.1% by weight of the silver-based antibiotic substance with a resin based on the total weight of the resin and forming an antibiotic layer on a surface of the perform of the part using the resin with the antibiotic substance mixed therewith. The silver-based antibiotic substance comprises 60 to 80%

by weight of an oxide of Ag ions having diameters of several dozen to hundred nanometers, 10 to 20% by weight of zirconium phosphate, and 10 to 20% by weight of a zinc oxide.

Applicant respectfully submits that this combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Niira, Kanari and Myers.

In rejecting claim 5, the Examiner stated that Myers discloses the use of zirconium phosphate and zinc oxide and that the claimed proportions of these elements with the oxide of silver ions would be obvious to one of ordinary skill after routine experimentation. Applicant respectfully submits that the disclosure of Myers does not support the Examiner's conclusion.

Myers discloses the use of various oxides, sulfates, sulfides, zeolites and other compounds such as zinc phosphate, and mixtures thereof as antimicrobial components in a plastic. The disclosures of mixtures of the various compounds is used as a basis for the Examiner's assertion that the proportions recited in claim 5, now incorporated into claim 1, were obvious. However, in the recited compound, the silver ions perform antibiotic and whitening functions and the zinc phosphate and zinc oxide serve as a matrix so that the silver ions can stably exist. The disclosure of this function can be found in the specification as page 4, lines 2-6 and page 6, lines 5-9.

Myers discloses the use of silver oxide, zinc oxide and zirconium phosphate as antibiotic materials. The disclosure of their function as antimicrobial elements would not lead one of ordinary skill, through routine experimentation to the claimed proportions, as alleged by the Examiner. The use of zinc oxide and zinc phosphate as a matrix for the oxides of silver ions results in a different compound as opposed to when the same materials are used as antimicrobials. The disclosure of the zirconium phosphate and zinc oxide as antimicrobials does not render obvious the claimed proportions when these elements are used as a matrix.

Applicant respectfully submits that the combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Niira, Kanari and Myers, for the reasons explained above. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

With regard to dependent claims 2, 3, 8 and 9, Applicant submits that these claims depend, either directly or indirectly, from independent claim 1 which is allowable for the reasons

set forth above, and therefore claims 2, 3, 8 and 9 are allowable. In addition, these claims recite further limitations which are not disclosed or made obvious by the applied prior art references. Reconsideration and allowance thereof are respectfully requested.

Claim 8 specifies that the antibiotic substance is in the form of pellets and claim 9 recites that the pellets are formed from powder. The advantages of pellets are disclosed in the specification on page 4, lines 7-11. The Examiner states that Niira discloses the use of pellets. However, column 4, lines 17-23 of Niira, relied upon by the Examiner, states that the antibiotic zeolites are pulverized to have an average particle size of not more than 6 microns, most preferably 0.5 to 2 microns. This fine powder cannot be considered pellets, as asserted by the Examiner.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

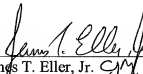
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Chris McDonald, Registration No. 41,533, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: August 3, 2009

Respectfully submitted,

By 

James T. Eller, Jr.

Registration No.: 39,538

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant